

Table S2. Annotation of the 'serotype island' including orthologous genes in PAO1 when applicable.

LPS	PA7 annotation	Annotation	Start	Stop	Strand	PAO1
	PSPA7_1944	Hypothetical protein	92	223	-	-
	PSPA7_1945	Hypothetical protein	212	1063	+	PA3185
	PSPA7_1946	DNA-binding transcriptional regulator HexR	1072	1929	-	PA3184
	zwf2	Glucose-6-phosphate 1-dehydrogenase	2116	3585	+	zwf
	PSPA7_1948	6-phosphogluconolactonase	3572	4288	+	pgl
	PSPA7_1949	keto-hydroxyglutarate-alcoholase	4306	4968	+	PA3181
	PSPA7_1950	Hypothetical protein	5059	5496	-	PA3180
	PSPA7_1951	Hypothetical protein	5644	6804	+	PA3179
	PSPA7_1952	Hypothetical protein	7062	7982	-	PA3178
	gltS	Sodium/glutamate symporter	8212	9426	-	PA3177
	PSPA7_1954	Formimidoylglutamase	9466	10401	-	PA3175
	PSPA7_1955	Putative transcriptional regulator	10421	11149	-	PA3174
	PSPA7_1956	Short chain dehydrogenase	11317	12057	-	PA3173
	gph2	Phosphoglycolate phosphatase	12122	12793	-	PA3172
	ubiG	3-demethylubiquinone-9 3-methyltransferase	12799	13497	-	PA3171
	PSPA7_1959	N-ethylammeline chlorohydrolase	13639	14973	-	PA3170
	mtnA	Methylthioribose-1-phosphate isomerase	15083	16159	+	PA3169
	gyrA	DNA gyrase subunit A	16396	19161	+	gyrA
	serC	Phosphoserine aminotransferase	19249	20334	+	serC
	pheA	Chorismate mutase	20334	21431	+	pheA
	hisC2	Histidinol-phosphate aminotransferase	21497	22606	+	hisC2
	PSPA7_1965	Bifunctional cyclohexadienyl dehydrogenase	22599	24839	+	-
	cmk	Cytidylate kinase	24839	25528	+	cmk
	rpsA	30S ribosomal protein S1	25814	27493	+	rpsA
OSA	ihfB	Integration host factor subunit beta	27630	27914	+	himD
OSA	PSPA7_1969	O-antigen chain length regulator	28504	29553	+	wzz
OSA	PSPA7_1970	NAD-dependent epimerase/dehydratase	29833	30813	+	-
OSA	PSPA7_1971	UDP-N-acetylglucosamine 2-epimerase	31969	33123	+	-
OSA	PSPA7_1972	Hypothetical protein	34563	34676	-	-
OSA	PSPA7_1973	Hypothetical protein	36675	36950	+	-
OSA	PSPA7_1974	Flagellin modification protein A	37639	38397	+	-
OSA	PSPA7_1975	Hypothetical protein	38468	39733	+	-
OSA	PSPA7_1976	O antigen flippase	39795	41024	+	-
OSA	PSPA7_1977	Hypothetical protein	41043	42347	+	-
OSA	PSPA7_1978	LPS biosynthesis protein WbpG	42344	43486	+	PA3150
OSA	PSPA7_1979	Imidazole glycerol phosphate synthase subunit HisF	44099	44881	+	PA3151
OSA	PSPA7_1980	Polysaccharide biosynthesis protein (wbjB)	44915	45949	+	-
OSA	PSPA7_1981	Protein WbjC	45953	47074	+	-
OSA	PSPA7_1982	UDP-N-acetylglucosamine 2-epimerase	47064	48215	+	PA3148
OSA	PSPA7_1983	Glycosyltransferase	48225	49478	+	PA3147
OSA	PSPA7_1984	UDP-glucose 4-epimerase	49475	50431	+	PA3146
OSA	PSPA7_1985	O-antigen initiating glycosyl transferase	50433	51452	+	PA3145
OSA	PSPA7_1986	Nucleotide sugar epimerase/dehydratase WbpM	51472	53484	+	PA3141
	PSPA7_1987	Hypothetical protein	53675	53998	+	PA3140
	PSPA7_1988	tRNA-Asn	54071	54148	-	-

PSPA7_1989	Aromatic amino acid aminotransferase	54216	55412	-	PA3139
uvrB	Excinuclease ABC subunit B	55599	57611	+	PA3138
PSPA7_1991	MFS family transporter	57615	59174	-	PA3137
PSPA7_1992	Putative secretion protein	59164	60198	-	PA3136
PSPA7_1993	Putative transcriptional regulator	60301	61221	+	PA3135
gltX	Glutamyl-tRNA synthetase	61259	62743	+	PA3134
PSPA7_1995	tRNA-Ala	62941	63018	+	PA3133.4
PSPA7_1996	tRNA-Glu	63065	63142	+	PA3133.3
PSPA7_1997	tRNA-Ala	63235	63310	+	PA3133.2
PSPA7_1998	tRNA-Glu	63356	63433	+	PA3133.1
PSPA7_1999	Putative transcriptional regulator	63590	64132	+	PA3133
PSPA7_2000	Putative hydrolase	64144	65001	+	PA3132
PSPA7_2001	Putative aldolase	65114	65761	+	PA3131
PSPA7_2002	Hypothetical protein	65761	66198	+	PA3130
PSPA7_2003	Hypothetical protein	66291	67250	+	PA3129
PSPA7_2004	Short chain dehydrogenase	67265	68011	-	PA3128
PSPA7_2005	Hypothetical protein	68028	68831	-	PA3127
ib	Heat-shock protein IbpA	68989	69438	+	PA3126